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ABSTRACT

A study was conducted to determine the long-term consequences of restructuring on the nature of work and mobility in the United States. The study compared the first 16 years of work experience for two cohorts of young white men from the National Longitudinal Surveys: the original cohort, followed from 1996-1981, and the recent cohort, followed from 1979-1994. Some of the findings are as follows: (1) in recent years, young workers' transition to the labor market has become more volatile and is also taking longer; (2) job instability has increased for young workers during the 1980s and early 1990s; (3) as a result of this higher job instability, youth in recent years have worked for more employers and have shorter tenures with one employers; (4) the recent cohort has failed to capture the all-important wage gains from early job searching, and the gains have become more unequal; and (5) wages are declining and wage mobility is more unequal. The study concluded that, on average, about two-thirds of job changes and wage growth occur during the first decade of labor market experience. Without a dramatic shift in the economy, therefore, the recent cohort can expect lower and more unequal lifetime wage growth than their predecessors. (Contains 20 references) (KC)

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Institute on Education and the Economy

Summary of Findings: Work and Opportunity in the Post-Industrial Labor Market

Annette Bernhardt
Martina Morris
Mark Handcock
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IEE Working Paper No. 6
February 1998

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Summary of Findings:
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This is a condensed and non-technical summary of a large-scale research project. Detailed findings can be found in the following 1998 IEE working papers: "Inequality and Mobility: Trends in Wage Growth for Young Adults," IEE Working Paper #7, and "Trends in Job Instability and Wages for Young Adult Men," IEE Working Paper #8.

Annette Bernhardt and Marc Scott are senior research associates at the Institute on Education and the Economy. Martina Morris is professor of sociology and Mark Handcock is professor of statistics at Pennsylvania State University. The authors would like to thank the Russell Sage and Rockefeller Foundations for their generous support. We are also grateful for the comments and suggestions given to us by Peter Gottschalk, Robert Mare, Charles Brown, Maury Gittleman, Francine Blau, Lawrence Kahn, David Neumark, Sheldon Danziger, Henry Farber, Thomas Lemieux, and Thomas Bailey.

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Executive Summary

One of the most pressing questions facing researchers and policy makers today is how economic restructuring has affected the nature of work and mobility in America. It is no longer simply a matter of rising wage inequality, but increasingly a question of what it means to have a job and to build a career. As workplaces are reorganized, there are potentially strong effects on job stability, career development, and upward mobility. Little is known about the long-term consequences of restructuring, so in this study we compare the first 16 years of work experience for two cohorts of young white men from the National Longitudinal Surveys: the *original cohort*, followed from 1966-1981, and the *recent cohort*, followed from 1979-1994. We find the following:

- **In recent years, young workers' transition to the labor market has become more volatile and is also taking longer.**

Among 30 year olds, 63% of the original cohort was employed for two or more years in a full-time job, as compared to only 56% of the recent cohort. Entry into the workforce has also become more volatile, as the recent cohort is 20% more likely to make the transition to work with repeated interruptions, moving into and out of work, and there is more shifting between industries. As a result, we find considerably more *variability* in accumulated work experience for the recent cohort, across all education groups.

- **Job instability has increased for young workers during the 1980s and early 1990s.**

We calculate that the odds of a job change are 34% higher for youth in the recent cohort as compared to the original cohort, after adjusting for basic factors such as age, education, work experience and tenure, attrition and local unemployment rates. Some of the higher job instability can be explained by lower marriage rates, longer periods of college enrollment, and the broad shift of the U.S. economy toward the service sector. But even in traditionally stable industries such as manufacturing, the odds of a job separation are about 30% higher for the recent cohort. A significant and unexplained difference in job stability remains after all controls, even for youth who have permanently entered the labor market and "settled down."

- **As a result of this higher job instability, youth in recent years have worked for more employers and have shorter tenures with one employer.**

By the early 30s, we find that the recent cohort is 20% more likely to hold tenures shorter than two years, and 21% less likely to hold tenures of seven years or longer, as compared to the original cohort. Even if the two cohorts suddenly became identical in the rate of job changing, this relative difference in tenure length would persist.

- **The recent cohort has failed to capture the all-important wage gains from early job searching, and the gains have become more unequal.**

The process of job search and job shopping, so important to young workers in the past, no longer confers the benefits it once did. The deterioration in wage gains for the recent cohort first appears between the ages of 16 and 21, especially among workers moving directly from high school into the labor market. It continues to the mid-30s, where it is shared by all but the most educated. There is also about 15% more inequality in the wage gains associated with a job change for the recent cohort.

- **The upshot: Declining and more unequal wage mobility**

We estimate that the typical worker in the original cohort saw his permanent hourly wage increase by $8.65 between the ages of 16 and 36, while the same worker in the recent cohort could expect an increase of only $6.69 (both figures in 1992 dollars). The losses are concentrated among those without a four-year college degree. While some workers continue to have substantial wage growth, the percent experiencing either no growth or real wage declines is 7.2% for the recent cohort, as compared to only 1.7% for the original cohort. The greater inequality in long-term wage growth is found across all levels of education, and is only partly explained by accumulated work experience, tenure, job changes, industry, and hours worked.

On average, about two-thirds of job changes and wage growth occur during the first decade of labor market experience. We have therefore measured most of the mobility that these young workers will experience during their career. Absent a dramatic shift in the American economy, the net result is that the recent cohort can expect lower and more unequal lifetime wage growth than their predecessors.

1. Background

American workers have seen marked changes in their jobs and wages during the last three decades. But it is no longer simply a matter of rising wage inequality. There is growing concern that the trends in wages may reflect even deeper changes in what it means to have a job and to build a career. The public is clearly anxious about layoffs and job security. Workplaces are being reorganized, yet not always in the interest of employees and not always in the high-performance mold. Youth are more pessimistic about their chances for upward mobility and education no longer seems a guarantee of success. The recovery of the 1990s did not prove the cure-all that other recoveries have in the past, and disadvantaged groups in particular are being left behind.

Compared to the post-war period, the American employment relationship appears to have changed – in how the workplace is organized, in how workers are matched with jobs, and in how wages and the terms of employment are set.

In the past, the ideal was that workers stayed with one company. Even if they never moved beyond the shop floor, they could expect annual raises and some measure of job security. In return, employers got control over labor supply and a committed workforce, or at least a fragile truce with labor. They also got a customized training system: workers brought firm-specific knowledge and skills to each new position up the ladder. This internal labor market had its benefits but also incurred a set of costs. Because employers made at least an implied commitment to their employees, they could not easily hire from the outside, change the number of hours worked, or alter wages and benefits (Hyman 1988, Kochan, Katz and McKersie 1986, Piore and Sabel 1984).

The terms of this trade-off have apparently deteriorated for American employers. Starting in the mid-70s, cost became an overriding basis of competition, and internal labor markets thus became a target for cutbacks. Permanent workers with long tenures need to be paid high wages and expensive benefits; some will sit idle during slack demand and others will find their skills become obsolete. Such a rigid environment is not conducive to cost reduction. In the search for flexibility, some firms have chosen to adopt high-performance work systems that benefit employees as well as raise productivity. Other firms, however, are now more willing to forego the motivation and specific knowledge of long-term employees, moving instead toward flexible staffing, reduced training, and external hiring for skilled workers. Probably the most prevalent are firms which combine elements of both strategies.[1]

Of course, even at the peak of mass production, many workers never directly experienced the benefits of life-long employment. Conversely, internal labor markets are alive and well for "core" workers in the new economy. The point, though, is that while both employment systems continue to exist, their relative share of jobs and workers appears to have changed.

From one perspective, this is good news. Productivity growth has increased in many industries, with an attendant boost in profits. Workplaces have become more efficient, technological innovation is brisk, and American global competitiveness has clearly been restored. In a variety of occupations, flexible jobs are enriching autonomy at work and making it easier to balance family and career responsibilities.

From another perspective, however, the news may not be so good. There is a growing sense among the public that individuals' life chances are becoming more unequal (Frank and Cook 1995). For significant numbers of workers, employment is being weaned from internal

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[1] For further analysis of the transformation of employment, see Cappelli (1995), Harrison (1994), Osterman (1994), and Pfeffer and Baron (1988).

labor markets, and this affects not only their current jobs but also their career prospects. What happens to promotions, raises, and "climbing up the ladder" when workers move from one employer to the next, and when the employers may be increasingly reluctant to invest in on-the-job training? The traditional routes to upward mobility break down. It is likely that skilled workers in professional occupations can create new career paths which preserve their opportunities. But for occupations further down the ladder – more numerous in absolute terms – the consequence may well be declining opportunities for upward mobility and career development.[2]

2. The Research Gap

In sum, one of the most pressing questions facing researchers and policy makers today is how economic restructuring has affected the nature of work and mobility in America. This is a complex question, and empirical research has only begun to address it.

There is an established body of research which documents the unprecedented rise in wage inequality, declining wages for low-skill workers, and marked deterioration in economic welfare for parts of the African American and Hispanic populations (Danziger and Gottschalk 1993, Levy and Murnane 1992, Mishel and Bernstein 1994). Many of these trends continue despite a strong economy and tight labor market. Forces deeper than the business cycle are at work, in particular the globalization of markets, new technology, and changes in wage-setting institutions.

[2] The top ten growth occupations are retail sales staff, registered nurses, cashiers, general office clerks, truck drivers, waiters and waitresses, nursing aides and orderlies, janitors and cleaners, food-preparation workers, and systems analysts (U.S. Department of Labor 1994).

Beyond these aggregate cross-sectional trends, however, the picture is less clear.[3] The problem is that we are interested in the *process* of change, not just the outcome, and in the impact on workers' careers, not just their current wage. We are asking whether the rules of work and mobility have changed – and this is difficult to test directly. It requires measurement of internal labor markets and workplace structures, of the processes by which wages are set and by which workers are matched with jobs (both inside and outside the firm).

While we have never been able to fully and directly measure these dynamic processes, longitudinal data can get us closer than cross-sectional data. If career development and upward mobility have been transformed in the new economy, then this should be observable in workers' employment histories. New research has therefore begun to focus on analyzing longitudinal datasets, taking up such questions as whether wage growth has deteriorated, whether the rate of job changing has increased, and how each of these processes unfolds over the work life. The hope is that these types of studies will enable us to gain a better understanding of exactly how the American employment relationship, broadly conceived, has changed over the past three decades.

Our project falls squarely into this emerging field, but with a unique research design and methodology. In this study, we compare two cohorts of young white men from the National Longitudinal Surveys. The *original cohort* entered the labor market in the mid 1960s at the tail of the economic boom, and was followed through the end of the 70s. The *recent cohort* entered the labor market in the early 1980s after the onset of economic restructuring, and was followed

[3] For example, while the public is convinced that jobs have become less stable, a clear empirical rise in job instability has been elusive. Analysts have had to rely on indirect evidence, such as the fast growth of contingent work (Belous 1989) and the increasing use of flexible staffing arrangements by firms (Houseman 1997).

through the mid 90s.[4] Rich and detailed information was gathered on schooling, work history, and job characteristics for both cohorts throughout the years of observation. The strength of this research design lies in the fact that we observe both cohorts across a full 16 years, at the same ages – respondents are in their late teens and early 20s at the start of the survey, and are in their mid 30s by the end. These are critical years for young workers. It is during this period that they make the transition to the labor force, lay the groundwork for an eventual long-term relationship with an employer, and experience the majority of their lifetime wage growth.

Our logic is that if indeed a new labor market structure is emerging in this country, then the recent cohort of young workers has been the first to experience it in full strength – and the impact should be observable in their work histories. For example, we ask whether job changing has become more frequent, whether the transition to the labor market has become more volatile, and whether long-run wage growth has become more unequal. Thus, by comparing the progress of the two cohorts, we can identify changes in career development and wage mobility over the last three decades, and examine the factors associated with these changes. While this is clearly an indirect test of the link between restructuring and mobility (we have no measures of the firms that employ these workers), it is a direct test of whether the nature of career mobility has changed. And because we are tracking both cohorts during the period when they experience the majority of their life-time wage growth, the changes we identify will have strong implications for the eventual distribution of worker welfare.

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[4] The restriction to white men only was necessitated by data limitations. Final sample sizes are 2,743 for the original cohort and 2,427 for the recent cohort. Any differences between the two cohorts in attrition, missed interviews, composition, and measurement have been adjusted for in all analyses.

3. Summary of Findings

In what follows, we summarize our central findings. This summary cannot do full justice to the many nuanced and detailed analyses we performed, nor can it provide an adequate discussion of the methodological issues and choices that were made. Each finding here represents a chapter in the full-length report, and the details are covered there.

- **In recent years, young workers' transition to the labor market has become more volatile and is also taking longer.**

There is considerable diversity in how young men make the transition from schooling into the labor market (Gardecki and Neumark 1997). Paid employment often begins during high school, and job churning after graduation is the norm, with frequent exits and reentries into the labor force. Some youth pursue higher education immediately, others first spend several years working, and still others interweave work and schooling over time. As a result, there are marked differences in how quickly young men establish long-term relationships with employers. For us, the question is whether there are systematic differences in this transition between the two cohorts.

Virtually all of the young workers in our samples had made the transition to permanent employment by the end of the survey, and many accumulated substantial work experience along the way. However, we found several important differences in the typical paths taken by the two cohorts.

First, the transition to permanent employment has become longer in recent years. Young workers who do not go on to college are more likely to experience periods of unemployment and to rely on part-time jobs for a greater number of years. This is especially marked among high school drop-outs. Those who do go on to college are more likely to work while enrolled and to

significantly draw out the period of enrollment: 29% of the original cohort had finished their college schooling by age 23, but only 22% of the recent cohort. For both education groups, it takes longer to settle into a stable job than it has in the past. Among 30-year olds, the percent of workers who were employed for two or more years in a full-time, year-round job was 63% of the original cohort, but only 56% for the recent cohort.

Second, not only has the transition become longer, it has become more volatile. The recent cohort is less likely to make a single transition to the labor market. Instead, these young workers are more likely to move back and forth between work, unemployment, and enrollment. The differences can be seen in Table 1. Here, each respondent's full work history sequence is classified into one of four categories: never working, always working, single transition, and repeated transitions. A single transition consists of an unbroken series of non-working years, followed by an unbroken series of working years. Repeated transitions consist of multiple moves into and out of working. The key feature of the table is that the probability of a sequence with repeated transitions is 20% higher (8 percentage points) for the recent cohort. This greater volatility is concentrated among those with less than a college degree and is driven by declines in continuous work and single transitions. While college graduates also show a decline in single transitions, it is not because of greater volatility but rather because they are more likely to work throughout their schooling years.

We also found that the *number* of interruptions has increased for the recent cohort, especially among those with less education, and that there is noticeably more shifting between industries in the recent cohort, at all ages. Some of this is driven by deindustrialization and the shift to service industries, but not all of it.

Finally, the greater volatility in the labor force transition has left its mark on accumulated work experience. While average work experience is similar across the two cohorts, there is considerably more *variability* in work experience for the recent cohort, and this holds true across all education groups. We know that experience is one of the most important predictors of success in the labor market, and so this trend puts a significant number of youth in the recent cohort at a distinct disadvantage.

- **Job instability has increased for young workers during the 1980s and early 1990s.**

If the transition to the labor market has become more volatile, is it also true that job changing has become more prevalent? The trends in job stability are currently a topic of much debate.

We find significantly higher job instability among young workers in recent years, as shown in Figure 1.[5] The top panel of the figure illustrates the well-known fact that young workers initially engage in a considerable amount of job shopping, which declines markedly as they begin to form permanent attachments to employers. In general, roughly two-thirds of life-time job changes occur in the first ten years of labor market experience for the average male worker (Topel and Ward 1992). The recent cohort, however, continues to have a clear disadvantage in attaining employment stability well into their 30's. The same story can be observed in the education breakdown in the middle panel.[6] The recent cohort experienced consistently higher instability across all education groups. Finally, the bottom panel shows that the longer a worker stays with his current employer, the less likely he is to leave that employer –

[5] Specifically, the measure shown in these graphs is a two-year job separation rate: given that a worker was employed in a given year, it is the probability that he has left that employer two years later.

but again the cohort difference remains strong across all levels of tenure. Thus the increase in job instability for the recent cohort can not be explained by changes in the distribution of age, education and tenure .

We calculate that the odds of a job change are 34% higher for youth in the recent cohort as compared to the original cohort. This is after adjusting for basic factors such as age, education, work experience and tenure, as well as for differences in attrition and local unemployment rates between the cohorts. Translated into real terms, it means that for the average male worker, the overall probability of a job change over two years was .61 for the original cohort but .68 for the recent cohort, a proportionate increase of 12%.

Some of the higher job instability can be explained by lower marriage rates and longer periods of college enrollment, and some by the broad shift of the U.S. economy toward the service sector. The recent cohort is less likely to be employed in the stable manufacturing and public sectors and more likely to be employed in the service sector, especially high-turnover industries such as retail trade and business services. However, even traditionally stable industries such as manufacturing no longer confer the stability to young workers that they once did: the odds of a job separation in this sector are about 30% higher for the recent cohort. Finally, after adjusting for all of these factors, a significant and unexplained difference in job stability remains between the two cohorts

Restricting the analysis to youth after they have permanently entered the labor market and "settled down" generates similar results. Thus the difference we have identified is not just an indicator of the longer and more volatile transition to the labor force. Rising job instability is a distinct and secular trend in the youth labor market over the past three decades.

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[6] This graph uses the *final* education level reached by the respondents here (so that we do not confound education with current enrollment, which is associated with higher job instability).

- **As a result of this higher job instability, youth in recent years have worked for more employers and have shorter tenures with one employer.**

If the recent cohort is changing jobs more frequently, then its tenures will on average be shorter. We find that the recent cohort has worked for significantly more employers and has lower median tenures, as compared to the original cohort. The decline in overall median tenure can be seen in Figure 2, and the pattern observed here is consistent across all education groups.[7] Early on, the recent cohort actually had somewhat longer tenures (due in part to their earlier entry into the labor force). After the mid-20s, however, their greater job instability begins to make itself felt in shorter tenures. By the early 30s, we find that 32% of the original cohort but 38% of the recent cohort had tenures shorter than two years. Conversely, 30% of the original cohort but only 24% of the recent cohort held tenures of seven years or longer.[8]

Note that even if the two cohorts suddenly became identical in the rate of job changing, this relative difference in tenure length would persist. Since we have found no evidence that job instability is converging, it is reasonable to assume that the two tenure distributions will likely grow even further apart in the future. The long-term implications for the recent cohort are troubling: as workers get older, income growth, benefits and promotion are usually attained via stable employment with one firm.

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[7] In this graph we exclude Vietnam veterans from the original cohort, because those serving in Vietnam lost several years of labor market participation and are therefore several years behind others in their cohort in terms of building a long-term relationship with one employer -- including them, however, does not eliminate the significance of the cohort difference.

[8] Vietnam veterans are included in these numbers.

- **The recent cohort has failed to capture the all-important wage gains from early job searching, while at the same time experiencing greater inequality in those gains.**

A solid body of research has established that job changing early in the career is highly beneficial, yielding greater wage gains than staying with one employer (Bartel and Borjas 1981). Roughly two-thirds of lifetime wage growth for the average male worker occurs during the first 10 years of labor market experience and "job shopping" (Murphy and Welch 1990).

Compared to the original cohort, however, the recent cohort has failed to capture wage gains precisely during this critical period of job search. In Figure 3, we have plotted median wage gains across a period of two years, for workers who changed jobs and for workers who stayed with the same employer.[9] We see that early in the career, job changing pays off more than staying with an employer – in fact, these wage gains are substantially higher than any experienced later on. After the mid-20s, there is less to be gained from switching employers and longer tenures begin to pay off more.

The striking message from these graphs, however, is that the recent cohort has failed to capture the big wage gains that were associated with job changing in the past – and this, at precisely the same time that job changing has become more common. The deterioration first appears between the ages of 16 and 21. Breakdowns by education show that it is young workers moving directly from high school into the labor market who have borne the brunt of the burden. A similar decline for job changers is evident in the early 30s, and this is shared by all but the most educated (those with a four-year college degree). By contrast, the two cohorts look much more alike in the wage gains they experience when staying with the same employer – yet we

[9] Specifically, between any two years, we record the change in (log) deflated hourly wages and whether or not the respondent changed employers.

know that fewer in the recent cohort are able to reap these returns to tenure, since median tenure has declined.

Finally, we found that the *variance* in these year-to-year wage gains has increased in the recent cohort. This is an important measure because it points to the inequality of wage growth. The increased variability is most pronounced among job changers, across all education groups. Moreover, it escalates with age and is therefore not simply an outgrowth of early instability. By the early 30s, the variability in wage gains resulting from a job change is roughly 15% higher for the recent cohort.[10]

In short, the process of job search and job shopping, so important for young worker's wage growth in the past, no longer confers the same benefits as it once did. Instead, the average gains from job search have declined, and the inequality in these gains has grown.

- **The upshot: Declining and more unequal wage mobility**

We have documented a series of marked differences between the two cohorts of young workers – in terms of smooth entry into the labor market, the likelihood of becoming unemployed, the amount of work experience that is accumulated, and in the extent of (and returns to) job changing.

In our final analysis, we assess the cumulative impact of these trends on the prospects for upward wage mobility. We ask two questions. First, has the amount of upward mobility changed, on average, for the recent cohort as compared to the original cohort? Second, has mobility become more unequal, so that there is an increasing divergence in the life chances of young workers? The answer to both questions is yes.

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[10] Specifically, the range between the 10th and 90th percentile.

Each individual worker builds his own distinctive trajectory of wage growth as he grows older. Some of those trajectories are steep, with substantial wage increases each year, and others are flat, with little wage growth over time. These wage trajectories, or profiles, capture the essence of upward mobility, so we compare these profiles, built over the 16-year survey period, across the two cohorts.

In practice, measuring these wage trajectories for individual workers is a difficult task, because fluctuations in wages from one year to the next can obscure the long-term growth in wages (Gottschalk and Moffitt 1994). We have therefore used a model to identify the *permanent* wage trajectories for workers in the two cohorts, net of short-term variability in wages and inflation.[11] The model produces a predicted permanent hourly wage for each respondent at each age, and we calculate for each respondent the difference in predicted wages between age 16 and 36. This difference captures the long-run, permanent wage growth that each respondent can be expected to attain over the 20 year period. The distribution of these wage gains is plotted in the first panel of Figure 4.

Two important trends emerge from this figure. First, young workers in recent years experienced significantly lower permanent wage growth, as compared to the past. Translated into real terms, we estimate that the typical worker in the original cohort saw his permanent hourly wage increase by $8.65 between the ages of 16 and 36, while the same worker in the recent cohort could expect an increase of only $6.69 (both figures in 1992 dollars). This loss has been felt largely by those without a four-year college degree. Second, long-term wage growth has become significantly more unequal and polarized. The distribution for the recent cohort has become flatter and more spread out, and in particular, the bottom tail has gotten much thicker.

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[11] The model effectively allows a unique wage profile for each person across his full work history, smoothing out fluctuations in wages that can result from temporary disturbances such as the business cycle.

While there remain workers who have steep wage profiles with substantial wage growth, there are now substantially more workers who have flatter profiles with minimal and even negative wage growth. We estimate that the percent of workers experiencing either no wage growth or real wage declines is 1.7% for the original cohort but 7.2% for the recent cohort. This polarization, or fanning out of the profiles, becomes progressively stronger as the young workers age and is consistent across different levels of education.

In order to explain this polarization in wage growth, we examined the impact of several factors: accumulated work experience, education level, tenure and recent job changes, industry, and hours worked. All help to explain the increase in inequality. The returns to a college education have nearly doubled in the recent cohort, and thus widened the relative gap between those who do and those who do not receive a college degree. It is not so much that more educated workers are doing better, but that less educated workers are doing worse. The returns to work experience have also increased, but as we know, the recent cohort shows greater inequality in the amount of experience accumulated. Job changing early in the career does not yield the same wage gains as it once did, yet more young workers are changing jobs. Finally, while the recent cohort is more likely to hold jobs in the service sector (which on average has lower wages than the industrial and public sectors), even employment in the latter sectors does not yield the same wage gains as it once did.

Together these trends explain roughly half of the difference in wage growth inequality between the two cohorts. After adjusting for these effects, we are left with the predicted wage gains in the second panel of Figure 4. There is now more similarity in the degree of inequality in the two distributions, but the cohort difference is not eliminated – it remains pronounced and significant after these controls. Substantially more workers in the recent cohort continue to

experience lower wage growth between the ages of 16 and 36, and fewer attain the mid-level gains enjoyed by their predecessors. Thus even after adjustment, we estimate that the percent of workers experiencing no permanent wage growth or actual wage declines is 0.9% for the original cohort but 5.1% for the recent cohort. On the other end of the scale, we estimate that the percent of workers who tripled their permanent wages between the ages of 16 and 36 was 42% of the original cohort but only 25% in the recent cohort.

In these data, we have measured most of the mobility that these young workers will experience during their career – the bulk of life-time wage growth occurs precisely during the period studied here, the first decade and a half of labor market experience. Absent a truly dramatic shift in the American economy, the greater inequality in upward mobility that we have documented here will persist over the life course of the recent cohort (see Duncan, Boisjoly and Smeeding 1996 for similar evidence along these lines).

4. Conclusion

A new generation is entering a transformed labor market, and especially for those without a college degree, the prospects for a living wage, stable employment, and upward mobility are not at all guaranteed. Our evidence suggests that entry into the workforce and career development have become more volatile processes, and in particular, job instability has increased. Partly as a consequence, long-term wage growth during these key years has been hit on two fronts – it has stagnated and become more unequal. To the extent that wage growth represents upward mobility, it is clear that the prospects for such mobility have deteriorated in recent years. Those without a four-year college degree have clearly gotten hit the hardest, and this represents the majority of workers. But workers higher up the skill and education ladder

have also experienced growing inequality and job instability within their ranks. Deindustrialization and the emergence of the service economy has clearly played a role, but even traditionally unionized industries no longer provide the same degree of stability and solid wages that they once did.

These findings suggest that there has indeed been a shift in the American employment relationship, that the rules of work and career mobility have changed. Our evidence linking these changes to restructuring at the firm and economy level is indirect, and we have not been able to successfully explain all of the differences that we uncovered in this study. What we have achieved is a more revealing window on the long-term consequences of the emerging labor market for white male workers. Absent a dramatic shift in the American economy, the net result is that the recent cohort can expect lower and more unequal lifetime wage growth than their predecessors.

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Table 1. Cohort differences in the transition to employment

	Never Employed	Always Employed	Single Transition	Repeated Transitions	*N*
Original Cohort	0.7	29.0	22.3	47.9	*2132*
High school drop-out	2.4	36.9	12.6	48.1	*253*
High school degree	0.6	42.3	18.3	38.8	*654*
Some college	0.8	29.2	22.2	47.7	*528*
B.A. and higher	0.3	13.5	29.7	56.5	*697*
Recent Cohort	0.8	25.1	18.1	55.9	*2694*
High school drop-out	2.3	15.7	15.7	66.2	*410*
High school degree	0.7	31.3	17	51.0	*1098*
Some college	0.3	29.3	14.8	55.7	*485*
B.A. and higher	0.6	18.2	23.5	57.8	*701*

Figure 1. Cohort differences in job change rates

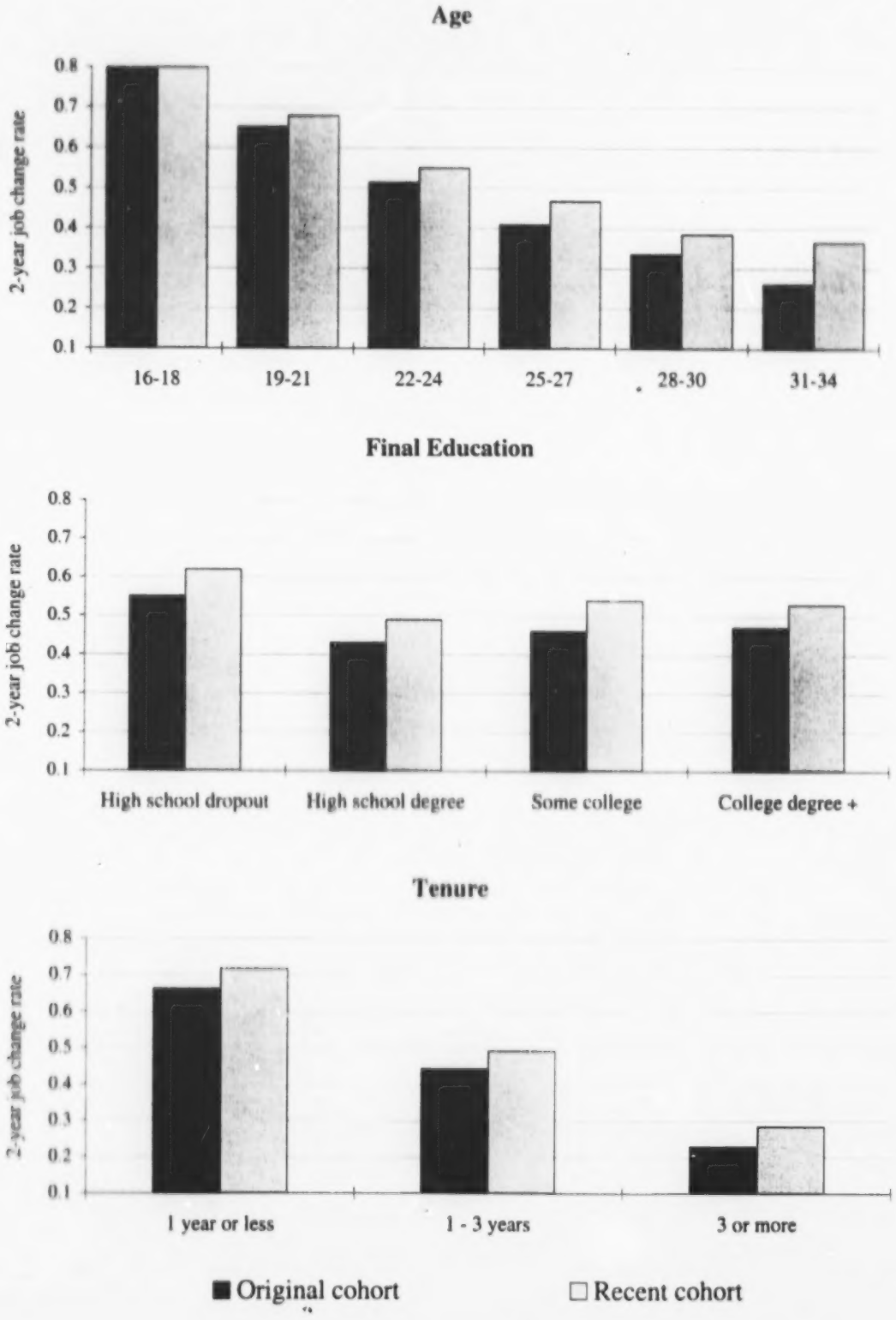


Figure 2. Cohort differences in median tenure, by age

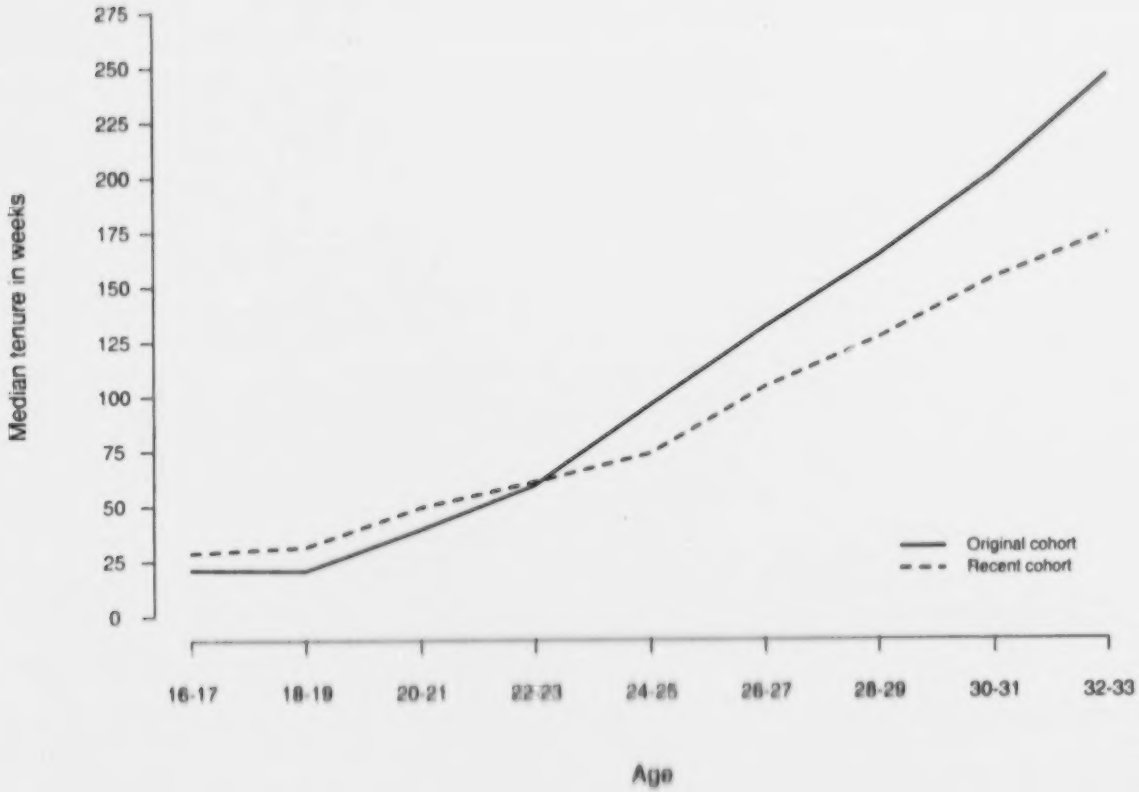


Figure 3. Median change in wages for workers who...

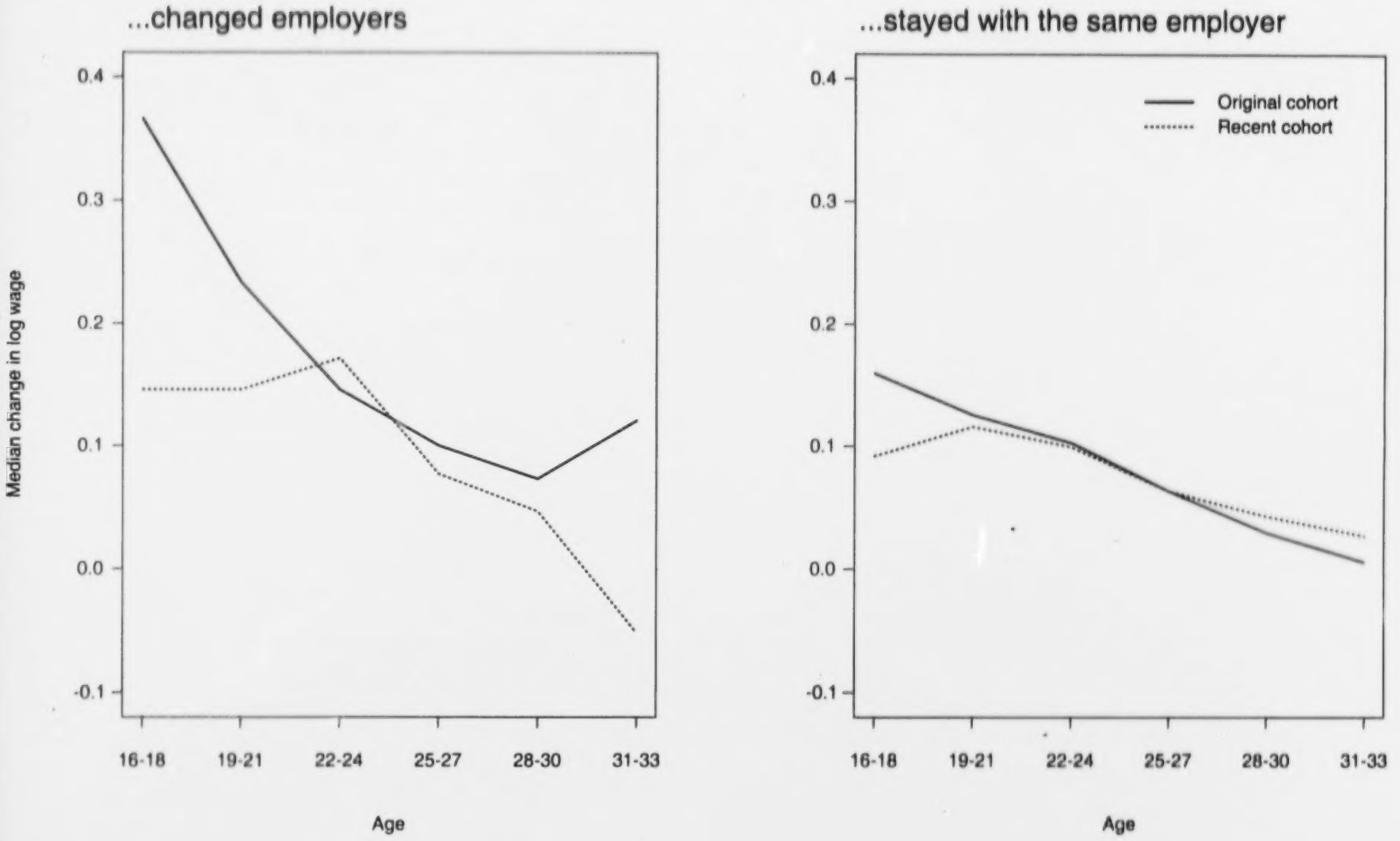
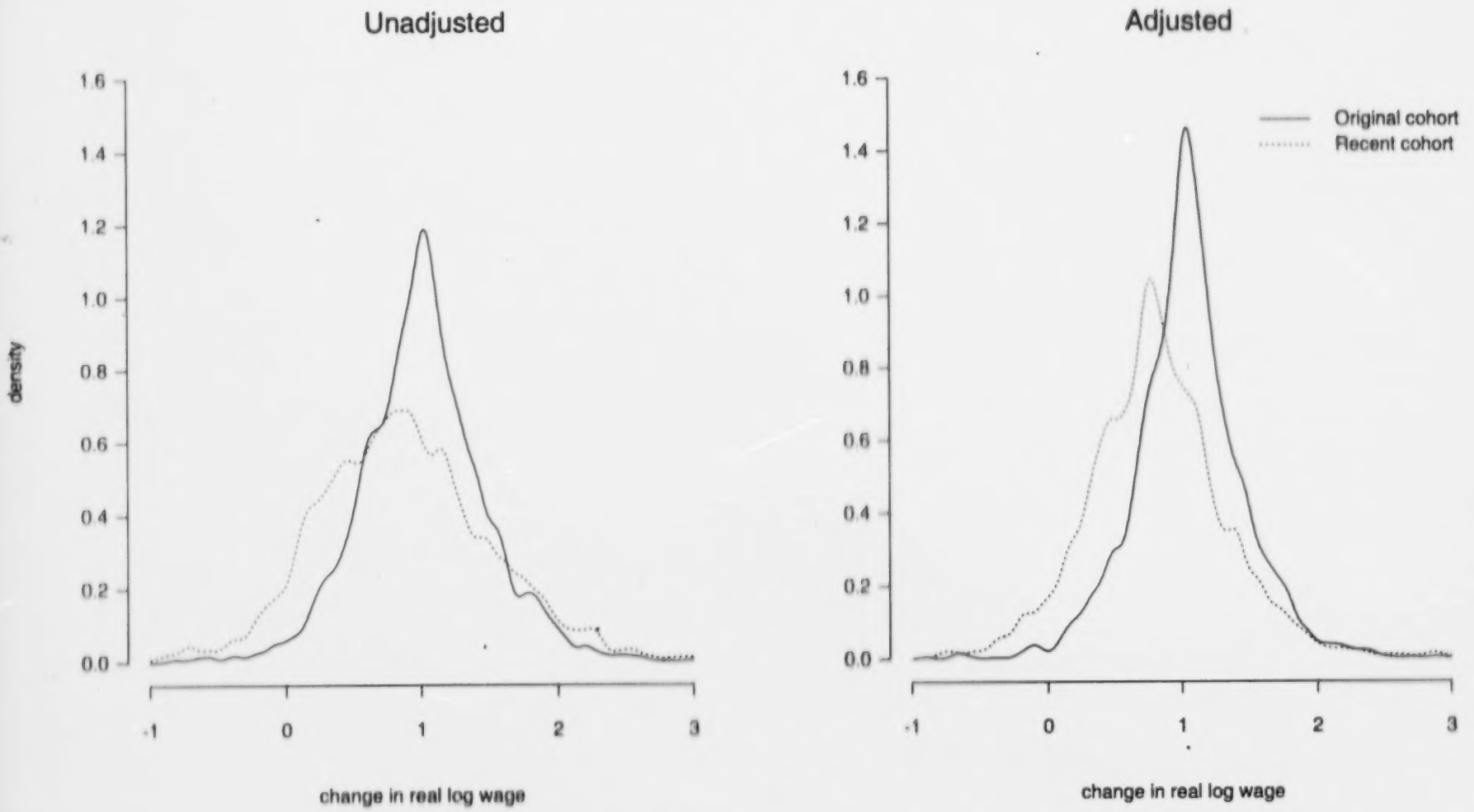


Figure 4. Predicted change in wages from age 16 to 36



Institute on Education and the Economy

Teachers College
Columbia University
Box 174
New York, New York 10027